

MICROCASSETTE™-CORDER

# BM-560

## OPERATING INSTRUCTIONS

Before operating the unit, please read this manual thoroughly and retain it for future reference.

## OWNER'S RECORD

The model number and the serial number are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. BM-560

Serial No. \_\_\_\_\_

Sony Corporation Printed in Japan © 1987

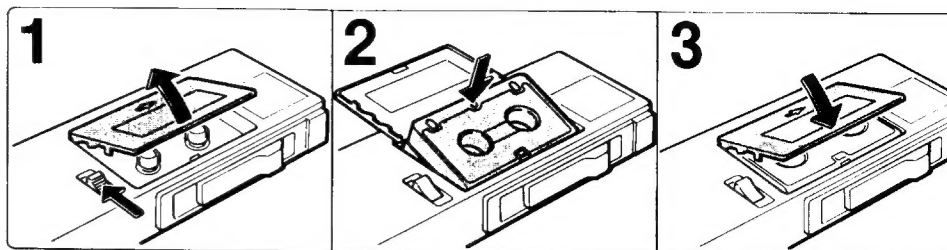


## FEATURES

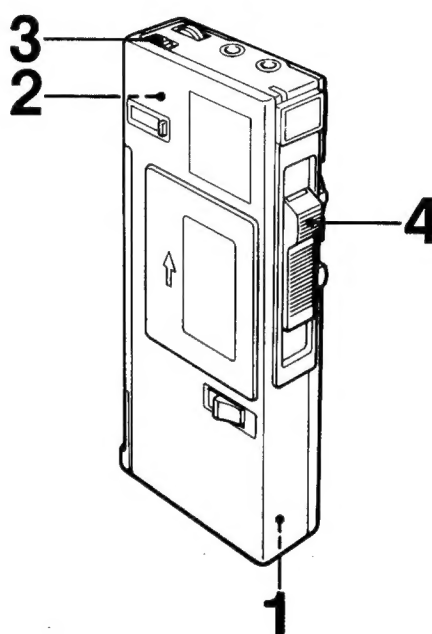
- One-hand operation with the slide-type function lever
- Electronic indexing function (LTR/SEC) assists in locating specific parts of a dictation.
- VOR (voice operated recording) system economizes on tapes, batteries and your time.
- Cassette empty alarm and tape end alarm function
- Electret condenser microphone with plug-in power system can be connected.
- The rechargeable battery can be charged in the battery compartment, while the AC adaptor is used.
- 3-digit tape counter for indicating the tape position.
- 4-way power source capability.

## CASSETTE INSERTION

Before inserting the cassette, take up any slack in the tape with a thick pencil.



## RECORDING





With the BM-560, even a cassette with the tabs removed can be recorded, and previous recordings are automatically erased.




- 1** Set the POWER switch to ON.
- 2** Set the VOR selector to the desired position.
- 3** Set SPEED to the desired tape speed.
- 4** Set the function lever to DICT.  
Recording starts.  
The DICT/BATT indicator flickers during recording.

To stop recording, set the function lever to STOP.

### To select the desired tape speed

2.4 cm 1.2 cm 	For optimum sound (recommended for normal use) A 60-minute recording can be made using both sides of the MC-60 Microcassette.
2.4 cm 1.2 cm 	For longer recording time A 120-minute recording can be made using both sides of the MC-60 Microcassette.

#### To set the VOR selector

HIGH		To operate VOR even at a low sound level
LOW		To operate VOR only at a high sound level
OFF		For no VOR recording

#### What's VOR (voice operated recording) system?

The tape moves only when sound is picked up, and the tape stops automatically when sound is no longer detected. Once you have set the VOR selector to HIGH or LOW, you can record with the VOR circuit, without the need for setting the function lever to STOP during periods of silence.

#### For locating instructions/documents easily

An electronic index signal will be recorded on the tape by using the LTR/SEC switch during recording.

Use the SEC position when giving instructions, and the LTR position at the end of each document.

When you use the Sony Microcassette desk tops (optional), the tape will stop automatically at each recorded index signal in the fast forward, backspace or rewind mode by the automatic stop function.

Note that this function does not work when the tape is transcribed by the BM-560.

#### To review your dictation

Keep the function lever down to the <sup>BACK</sup>SPACE position, and release it at the desired position. The recorded material will be heard.



#### Recording with an external microphone

Connect the microphone to the MIC jack and set the unit in the recording mode. When connecting the electret condenser microphone with "plug-in power" system, the power is supplied from the MIC (PLUG IN POWER) jack of the BM-560, and you do not have to insert a battery in the microphone.

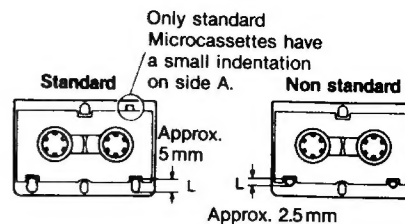
**For telephone recording,** connect the TL-2 telephone pickup (optional) to the MIC jack, and set the BM-560 in the recording mode. Refer to the instruction manual of the TL-2.

For indexing the tape contents, set the tape counter to 000 by pushing the reset button.

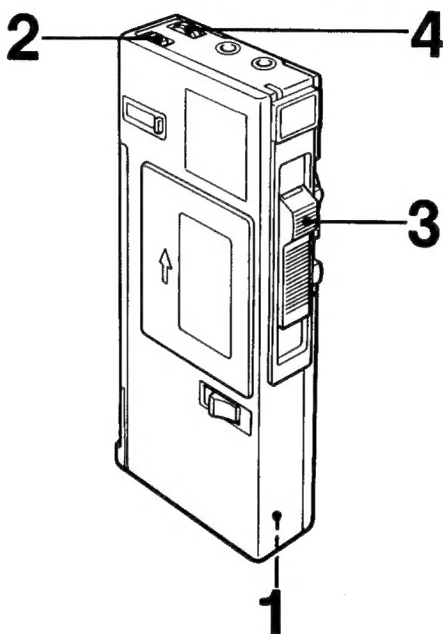
#### To set the LTR/SEC switch

	LTR	Push up to record an electronic index signal at the end of document. Wait for approx. 3 seconds until the signal is recorded on the tape. Then, set the function lever to STOP.
	SEC	Pull down to record an electronic index signal and record instructions to the secretary.

This unit uses only standard Microcassette. Non standard cassettes cannot be used because their "L" dimension (see illustration) is different.



## PLAYBACK



- 1 Set the POWER switch to ON.
- 2 Set SPEED to the same tape speed as that used for recording.
- 3 Set the function lever to LISTEN.
- 4 Adjust the VOL control  
During playback, the DICT/BATT indicator lights.

To stop playback, set the function lever to STOP.

### To fast forward the tape

Slide the FF/CUE lever in the direction of the arrow, with the function lever set to STOP. To stop the tape, release the FF/CUE lever.

### To skip-over unnecessary portions

During playback, slide the FF/CUE lever in the direction of the arrow. When you release

### To erase the entire tape contents

Use the BE-2 or BE-9H cassette eraser (optional).

For private listening, connect the earphone to the EAR jack.

the lever, the unit will automatically return to the playback mode.

#### Empty alarm alerts you when

No cassette is placed in the cassette compartment at recording, playback, review and fast forwarding, or the tape reaches its end in any mode, the empty alarm will sound. To stop the alarm, set the function lever to STOP.

#### To conserve batteries

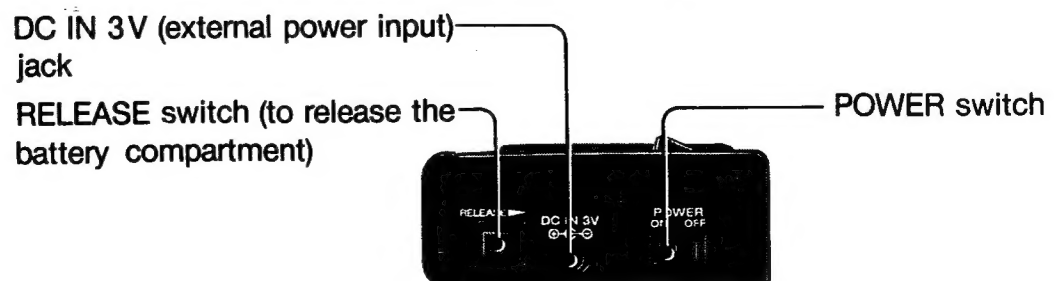
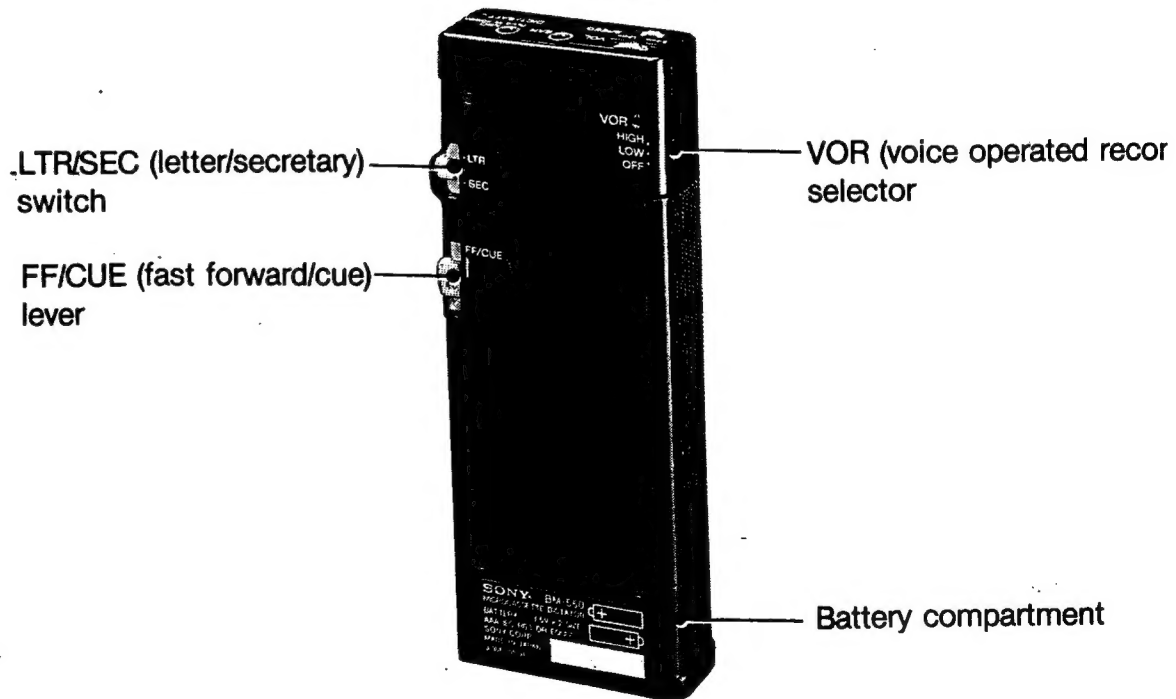
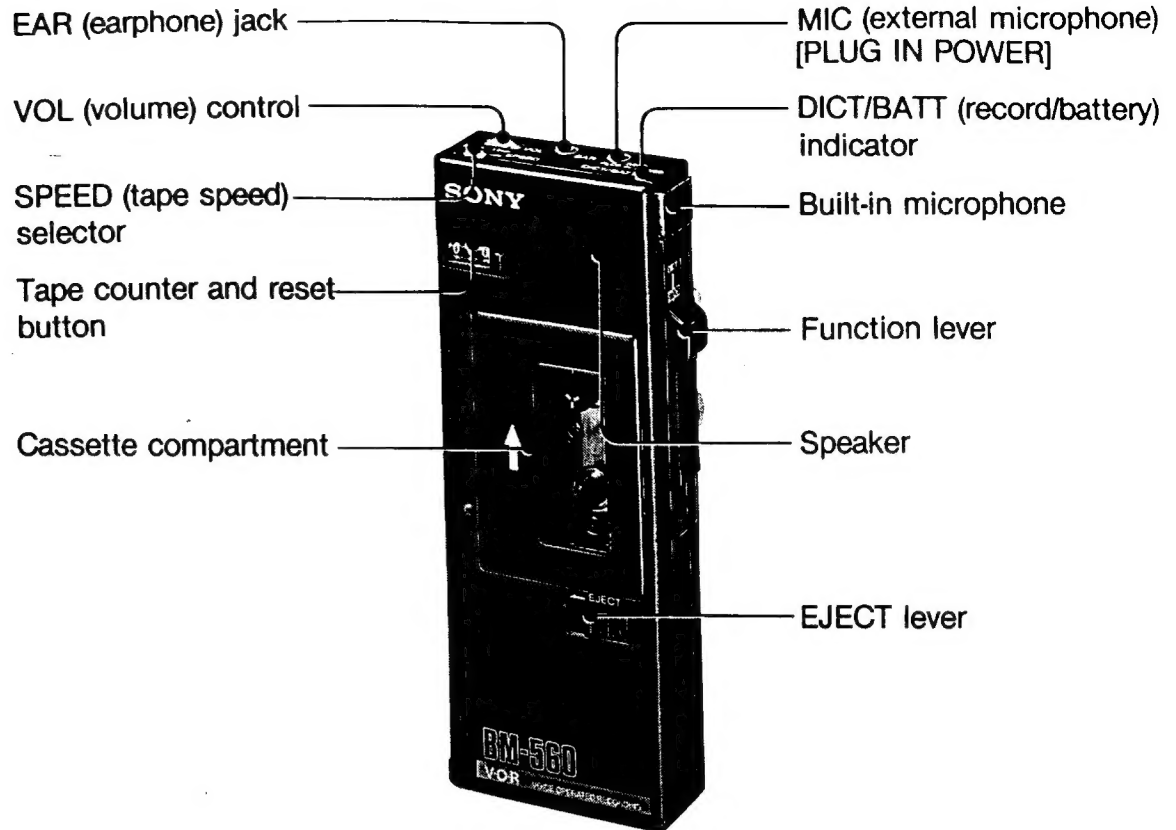
Set POWER to OFF. With this switch OFF, the unit will not turn on, even if the function lever is set to an operating mode by mistake, while you are carrying the unit.

## TROUBLESHOOTING

If any problem persists after you have made these checks, consult your nearest Sony dealer.

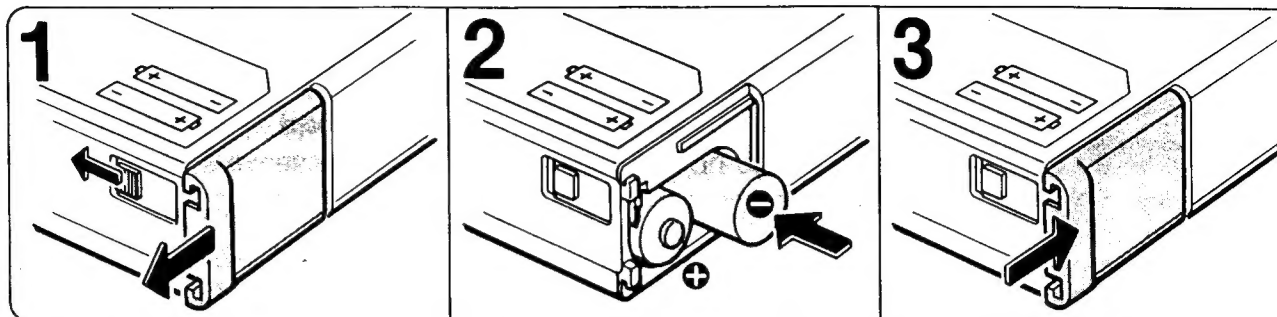
Trouble	Cause and/or remedy
Cassette cannot be inserted.	<ul style="list-style-type: none"><li>• Cassette is inserted improperly. See "CASSETTE INSERTION."</li><li>• The function lever is set to LISTEN or DICT. (end or empty alarm sound)</li></ul>
The function lever is set to DICT, or LISTEN, but playback/recording does not start.	<ul style="list-style-type: none"><li>• Incorrect polarity of batteries.</li><li>• Weak batteries.</li><li>• The POWER switch is set to OFF.</li></ul>
No sound from the speaker.	<ul style="list-style-type: none"><li>• The earphone is plugged in.</li><li>• The VOL control is turned down completely.</li></ul>
Weak or distorted sound.	<ul style="list-style-type: none"><li>• Weak batteries.</li></ul>
Sound drops-outs, loss of high frequencies, or excessive noise.	<ul style="list-style-type: none"><li>• Dirty heads. See "MAINTENANCE".</li></ul>
Tape speed is excessively fast or slow while playing back.	<ul style="list-style-type: none"><li>• Improper setting of the SPEED selector.</li></ul>
Recording cannot be made or unsatisfactory.	<ul style="list-style-type: none"><li>• Weak batteries.</li><li>• Dirty recording/playback head. See "MAINTENANCE".</li><li>• Improper setting of the VOR selector. Set to "HIGH" or "OFF".</li></ul>
Unsatisfactory erasing.	<ul style="list-style-type: none"><li>• Dirty erase head. See "MAINTENANCE".</li></ul>

# LOCATION OF CONTROLS



# BATTERY INSTALLATION

Insert two size AAA batteries (R03).  
For maximum performance we  
recommend alkaline batteries.



**Note:** If the unit is not to be used for a long period of time or is to be operated extensively with other power sources, remove the batteries to avoid damage caused by battery leakage and corrosion.

## When to replace the batteries

When the batteries become weak, the DICT/BATT indicator will glow faintly. In this case replace the batteries. Operation with weak batteries will cause distorted sound.

# OTHER POWER SOURCES

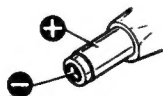
## House current (120 V AC, 60 Hz)

Use the AC-D2M AC power adaptor (optional). First connect the adaptor to the DC IN 3V jack, then to a wall outlet.

## Car battery (12 V)

Use the DCC-127A car battery cord (optional). Connect to the DC IN 3V jack using the PC-200 DC plug adaptor.

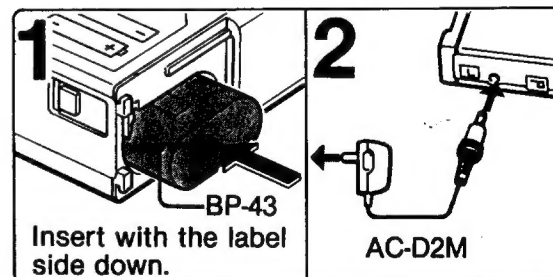
**Note:** Use only the recommended car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.



Polarity of the Sony plug

## Rechargeable battery

Use the BP-43 rechargeable battery. Before using, charge the rechargeable battery. It can be also charged while the unit is operating on power from the AC adaptor AC-D2M (optional). 2 hours of operation is possible after charged for 5 hours in the stop mode.



## PRECAUTIONS

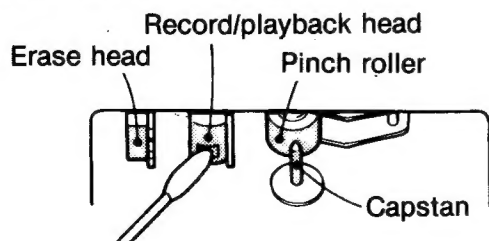
- Do not open the cabinet. Refer servicing to qualified personnel only.
- Operate the unit only on 3V DC.  
For AC operation, use the AC power adaptor recommended for this unit. Do not use any other AC power adaptor. For car battery operation, use the car battery cord recommended for this unit. Do not use any other car battery cord.
- Use only the **MICROCASSETTE**™ with this unit.
- Two tape speeds can be selected for recording with the SPEED selector:  
2.4 cm/sec or 1.2 cm/sec. Match the playback speed to the recording speed. For further details, refer to "To select the desired tape speed".
- Do not place the unit in a hot or humid place or in a place subject to excessive dust or vibration.
- A strong magnet is used for the speaker. Keep personal credit cards using magnetic coding and spring-wound watches away from the unit to prevent possible damage.
- If the unit has not been used for a long time, set it in playback mode and warm it up for a few minutes before inserting a cassette.

If you have any questions or problems, please consult your nearest Sony dealer.

## MAINTENANCE

### CLEANING THE HEADS

Clean the tape heads after every 10 hours of use for the proper operation of the unit. Moisten a cotton swab or a soft cloth with denatured alcohol, and wipe the parts shown below.



### CLEANING THE CASE

Clean the case with a soft cloth slightly moistened with water or a mild detergent solution. Do not use alcohol, benzine or thinner as they may mar the finish.

## SPECIFICATIONS

Tape	<b>MICROCASSETTE</b> ™
Track system	4-track 2 channel monaural
Tape speeds	2.4 cm/sec. (15/16 ips), 1.2 cm/sec. (15/32 ips)
Frequency response	250–5,000 Hz (at 2.4 cm position)
Input	Microphone jack (mini jack) Sensitivity 0.2 mW for 3 kilohms or low-impedance microphone
Output	Earphone jack (mini jack) for 8–300 ohms earphone
Speaker	Approx. 2.8 cm (1 1/8 inches) dia.
Power output	250 mW (at 10% harmonic distortion)
Power requirement	3V DC, two size AAA (R03) or optional Sony BP-43 rechargeable batteries DC IN 3V jack accepts: Sony AC-D2M AC power adaptor (optional) for use on 120V AC, 60Hz Sony DCC-127A car battery cord (optional) and PC-200 DC plug adaptor (optional) for use on 12V car battery
Battery life	Continuous recording hours with built-in microphone: Approx. 6.5 hours (average) with alkaline batteries Approx. 2 hours with a rechargeable battery after charged for 5 hours
Dimensions	Approx. 50×134×20.2 mm (w/h/d) (2×5 9/32 × 13 1/16 inches) not incl. projecting parts and controls
Weight	Approx. 180 g (6 2/5 oz) incl. batteries
Accessories supplied	Microcassette (1) Earphone (1) Carrying case (1)

Design and specifications subject to change without notice.

### OPTIONAL ACCESSORIES

Microcassette tape	MC-30BM, MC-60BM
AC power adaptor	AC-D2M
Car battery cord	DCC-127A
DC plug adaptor	PC-200
Electret condenser microphone	ECM-155, ECM-144
Rechargeable battery	BP-43
Cassette eraser	BE-2, BE-9H
Telephone pickup	TL-2